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# THE Unexplained

MYSTERIES OF MIND SPACE & TIME

**UFO photofile**  
**The healer within**  
**Can animals be kind?**  
**The boy with no past**  
**Mammoth mystery**  
**UFO force fields**

# 49





# THE Unexplained

MYSTERIES OF MIND SPACE & TIME

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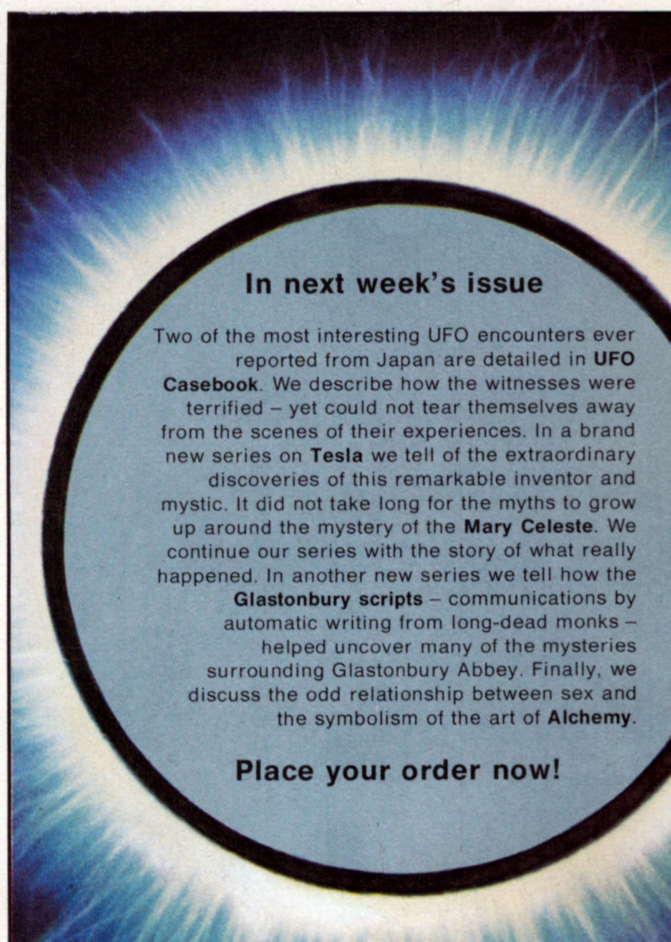
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# The boy with no past

Who was the youth found – bewildered and barely able to speak – in Nuremberg in 1828? Where did he come from? What was his background? GRAHAM FULLER and IAN KNIGHT examine the enigma of Kaspar Hauser



Kaspar Hauser as he first appeared in the streets of Nuremberg in May 1828. No one knew who he was or where he came from. The two letters he carried seemed to offer some clue as to his origins, but subsequent investigation led nowhere

NUREMBERG, SECOND CITY in Germany's fairyland state of Bavaria, was in decline in the early 19th century. The medieval splendour of the days of the Hohenzollerns – who had ruled with an iron hand from their castle above the old town – was gone, and the revival brought about by the industrial revolution was yet to come. Nuremberg was a secluded provincial city, yet for five years it was to be the centre of sensation and speculation throughout Europe.

The cause of this excitement was a youth of about 17 years of age, who made his appearance in the city's Unschlitt Square on 26 May 1828. It was Whit Monday, and the day of the annual *Ausflug*, a public holiday. A cobbler, taking his morning constitutional, noticed a youth moving unsteadily in the centre of the street, moaning softly and apparently oblivious of his surroundings. Thinking that the boy might be ill, the cobbler approached him and offered his help. The boy's response was unintelligible, but in his left hand he was clutching an envelope, and the cobbler saw that it was addressed to 'the Captain of the 4th Squadron, 6th Cavalry Regiment'. Intrigued, the cobbler led his new acquaintance to the captain's house, supporting the youth as he staggered and stumbled.

The captain was not at home, but his servant admitted the pair and offered them refreshments. Servant and cobbler alike watched with unabashed curiosity as the youth wolfed bread and water but shied away, as if physically revolted, from meat and beer, all the while staring about him.

## 'Take care of my child'

When the captain came home, his presence provoked some excitement in the youth, who seemed delighted by his uniform and sword, and kept repeating the words, 'Want to be a soldier like father', 'Don't know' and 'Horse, horse' – which seemed to be the extent of his vocabulary. The envelope he carried proved to contain two letters, neither of which was very enlightening. One purported to be from the boy's mother, giving the date of his birth as 30 April 1812 and exhorting the reader to 'Take care of my child. He has been baptised. His father was a soldier in the 6th Cavalry.' The other, supposedly from a labourer into whose hands the boy had been delivered in October 1812, but written in the same hand as the first, claimed that the writer was afflicted by God with 10 children and could no longer look after this one. It contained the bizarre information that the boy had been brought up since infancy in a locked room, seeing and hearing nothing of his family or the outside world.

The captain questioned the youth but,



## Kaspar Hauser

receiving no intelligible replies, finally declared that his visitor was 'either a primitive savage or an imbecile', and handed him over to the police as a foundling. The police, however, elicited only the same fractured sentences in answer to their rigorous questioning. Unsure how to proceed, they lodged him in a cell and carefully looked him over. He seemed sturdy enough, and one police officer noted that 'he had a very healthy colour; he did not appear pale or delicate.' The soles of his feet and the palms of his hands were soft, and his feet were also blistered and bleeding. When found, the boy had been wearing a pair of boots that were split at the seams and reinforced with nails and horseshoes, tattered breeches, a jacket that seemed to have been cut from an old frock-coat, and a hat. Nothing offered any clue as to his origins.

The jailer soon noted the behavioural peculiarities of his new charge:

He can sit for hours without moving a limb. He does not pace the floor, nor does he try to sleep. He sits rigidly without growing in the least uncomfortable. Also, he prefers darkness to light, and can move about in it like a cat.

### 'Neither insane nor dull-witted'

A doctor called in to examine him suggested that the youth's ability to sit motionless for hours was due to a distortion of his knee joints caused by long periods spent sitting with his legs straight in front of him when young; this in turn accounted for his unsteady gait when walking. The doctor was certain, however, that 'This man is neither insane nor dull-witted, but he has apparently been forcibly prevented in the most disastrous way from attaining any personal or social development.'

Finally someone thought to give the youth a sheet of paper and a pen, with surprising results. He covered the paper with childish lettering, from which only three words emerged: *Reiter* ('cavalryman') and Kaspar Hauser. It was immediately taken that his name was Kaspar Hauser and, although at first he refused to respond to it in any way, he has been known by it ever since.

Kaspar Hauser became an overnight sensation in Nuremberg, the major topic of conversation in a quiet city in holiday mood. Crowds of curious sightseers gathered outside his cell to watch him eat, sleep and defecate without his showing any sign of embarrassment. One of the policemen gave him a small model horse to play with and he was so overjoyed with it that well-wishers soon presented him with half a dozen more. Exposed to a bewildering number of new people, Kaspar began to add to his vocabulary, and within a few weeks he was able to stand before Bürgermeister Binder and members of the town council and give an account of himself. The council published it, in much polished form, as 'Bulletin Number



A rooftop view of Nuremberg in the early 19th century. Fascinated and intrigued by the mysterious Kaspar Hauser, the citizens adopted the boy and entrusted him to Professor George Daumer, the city's finest educationalist

Kaspar Hauser's appearance, seemingly from nowhere, caused great speculation throughout Europe, and rumours abounded as to his origins. One theory was that he was the illegitimate son of Stephanie de Beauharnais, Grand Duchess of Baden (below), and that he had been kept in isolation to avoid a scandal



### One' concerning their 'Child of Nuremberg'

He neither knows who he is nor where he came from, for it was only at Nuremberg that he came into the world. He always lived in a hole, where he sat on straw on the ground; he never heard a sound nor saw a vivid light. He awoke and slept and awoke again; when he awoke he found a loaf of bread and a pitcher of water beside him. Sometimes the water tasted nasty, and then he fell asleep again, and when he woke up he found a clean shirt on; he never saw the face of the man who came to him. He had two wooden horses and some ribbons to play with; he was never ill, never unhappy in his hole. . . . One day the man came into his room and put a table over his feet; something white lay on the table, and on this the man made black marks with a pencil which he put in his fingers. This the man did several times and when he was gone Kaspar imitated what he had done. At last he taught him to stand and to walk and finally carried him out of his hole. Of what happened next Kaspar had no very clear idea, until he found himself in Nuremberg with a letter in his hand.

The official bulletin turned Kaspar into a celebrity and his fame spread far beyond the confines of Nuremberg's city walls. Some doubted it all, believing the boy to be a hoaxer and pointing out that Kaspar must have been singularly lacking in curiosity if he had failed to see the face of his guardian at least once in 16 years. Others countered that the man had probably been masked – a suggestion borne out to some extent by subsequent events – and hinted darkly that the boy was the illegitimate son of an aristocratic family, hidden away to prevent a scandal and released only when the conspirators were sure that his identity could not be traced. And traced it was not; the police conducted an exhaustive investigation in and



around Nuremberg in an attempt to find Kaspar's 'hole'. Nothing was discovered, and the clues connecting him with the 6th Cavalry led nowhere.

Rather proud of their new and increasingly renowned founding, the Nuremberg authorities put the boy into the care of Professor George Friedrich Daumer, a noted educationalist and philosopher. To Daumer, Kaspar was the perfect example of the 'feral' child, one who had grown up completely cut off from human contact. The response of such primitives to the outside world was the subject of much discussion among scientists of the day, and Daumer kept careful note of Kaspar's reactions.

Certainly his animal senses were extremely well-developed. His hearing was sharp. He could see in the dark and had apparently taken some time to accustom

Right: Castle Pilsach, which some have suggested was the childhood home of Kaspar Hauser. It is thought that Kaspar was kept in a small windowless – or permanently shuttered – room in the castle, and was tended by its caretaker, Franz Richter. When Richter's wife died, he no longer felt able to look after the boy and sent him to Nuremberg



himself to bright light. Most acute was his sense of smell. Once he had identified a particular animal's scent, he could track it with ease – a faculty that enabled him to recognise humans in the dark. He could even distinguish trees by the scent of their leaves.

Daumer noted that Kaspar had no idea about the fundamentals of science that govern everyday life. He seemed unable to distinguish between animate and inanimate objects, and was convinced that a ticking grandfather clock was alive, refusing to go near it. When confronted with a mirror he looked behind it to find the owner of the face staring at him. He attempted to pick the flame from the tip of a burning piece of waxed paper – and cried when it burned him. He expected animals to behave in the same way as humans, and believed that balls bounced because they wanted to jump.

Yet Kaspar was not otherwise slow to learn. Daumer was a gifted man and he obtained excellent results from his pupil. Kaspar showed himself to be surprisingly intelligent and possessed of a seemingly

Notes and drawings made by Kaspar Hauser during his tutelage under Professor Daumer. Kaspar learned to read and write very quickly, but this only furthered the controversy about his origins: those who believed him to be of noble birth claimed that, had Kaspar been a peasant boy, he would not have achieved so much in such a short time; the sceptics stated that his progress could be regarded as perfectly normal

photographic memory, which seldom let him forget a face. He learned to read, write and articulate, and some of his surviving notes include finely executed drawings.

Furthermore, Kaspar Hauser revelled in the attention that came his way after so much social deprivation. For the best part of a year he was Nuremberg's most fêted celebrity, the star personality in fashionable drawing-room conversation. Visitors called to see him regularly and he was frequently invited out. His case is not dissimilar to that of John Merrick, the deformed 'elephant man' whose tragedy made him as great a celebrity with Victorian society as Kaspar's mysterious origins made him with the Nuremberg gentry. Opinions concerning those origins polarised. The people who believed his story now openly linked him with the ruling family of Bavaria, suggesting that he was the bastard son of the Grand Duchess of Baden. To support their claim they cited Daumer's achievements in Kaspar's education. No peasant boy could have learned so much so quickly and, besides, why would any peasant family go to such trouble to hide his origins?

Many, however, were sceptical of such theories. They took Kaspar's introductory letters at face value, declaiming that the behaviour of a peasant family over-stocked with children need not be rationalised. They pointed to the rough clothes Kaspar was wearing when discovered, and suggested that his progress seemed remarkable only in the light of his previous history. In an ordinary child such achievements would pass unnoticed. Some still believed the whole thing a hoax, that Kaspar's idiosyncrasies had been exaggerated, and that his early inarticulacy was due to his being a foreign vagrant.

To state his case further, and to quieten his detractors, Kaspar Hauser sat down with Professor Daumer in the summer of 1829 and wrote his autobiography.

What was the truth about the origins of Kaspar Hauser? See page 1018





Left: the Edinburgh statue of Greyfriars Bobby, whose loyalty to the memory of his master made him a local hero

Below: the worker bee stinging, for the defence of his community. However, every such attack is fatal to the bee

Right: an African bullfrog eats another of its own species; cannibalism among animals is relatively common

Below right: a Killdeer plover feigns injury, offering herself as bait in order to draw predators away from her offspring who are helpless in their nest

Bottom right: a lioness with her cubs. Her ferocity in defending them is legendary, yet often in doing so she makes herself vulnerable to attack



## Can animals be kind?

**A casual study of animal society reveals what appears to be an astonishing range of selfless behaviour. But, asks GILL NEVILL, is this apparent altruism merely genetic programming to ensure survival of the species?**

IN THE MIDDLE OF EDINBURGH stands a monument to the loyalty of a dog. It commemorates a small Skye terrier that, disregarding both scolding and entreaty, for 14 years stood nightly watch at the graveside of his master.

The dog was, of course, Greyfriars Bobby, whose life is the subject of both a book and a film. But famous though Bobby's story is, there are hundreds of other similar tales. They are to be found in almost every newspaper in the world, and the best of them have earned places in literature.

In South Africa, for instance, lived the plucky terrier immortalised in the book *Jock of the Bushveld*; in Italy, Dox, the police dog who rescued his master from mountain bandits; and in Wales, Beddgelert, after whom a village was named following a heroic episode involving a baby and a marauding wolf.

And such stories are not confined to dogs. There are reports of dolphins rescuing drowning swimmers, and, in particular, of the New Zealand dolphin Pelorus Jack, which regularly escorted ships safely through a particularly dangerous sound. Horses, too,



wolves and even pet lions have all contributed to the mythology of animal heroism.

But why, in the tough natural world, do animals often seem to act for the good of others – often at considerable risk to themselves? This is one of the most perplexing problems of the animal world. However sentimental we are about animals, we know that, as well as being cuddly and charming, they have plenty of unpleasant characteristics. Nature, Tennyson said, is 'red in tooth and claw', and it is true that instances of animal cruelty come to mind more readily than those of their loyalty. Butcher birds pin butterflies onto thorn trees. Cats 'play' with dying mice. Foxes kill hens they have no intention of eating.

In the animal world there is no place for ethics, and even cannibalism is legitimate. An encounter of two caterpillars of the large blue butterfly invariably results in one consuming the other. The large blue has recently died out in England, although not as a direct result of this larval cannibalism. Certain spiders and mantids are notorious for eating their mates in mid-copulation, while the male of the African clawed frog, having embraced his chosen mate, allegedly spins her round so violently that she collapses. He then ravishes her in peace.

It was Charles Darwin who first drew attention to the constant battle going on in





the animal world. And his contemporary Herbert Spencer coined the rather lacklustre phrase 'survival of the fittest' to denote the merciless process by which the strongest survive and the weakest go to the wall.

The battlefield Darwin depicts is hardly a suitable place for altruism. Any time spent helping another animal is time that could have been spent getting ahead and leaving descendants. And so the mystery. How did altruism evolve in the animal world? Why didn't natural selection wipe it out almost before it had begun? Indeed, does self-sacrifice really exist among animals? Or is what we take for altruism merely a hidden form of self-interest?

These questions are the subject of surprisingly heated debate among biologists. The intensity of their interest springs not just from a straightforward desire to understand the animal world more fully, but from the fact that the answers may have disturbing implications for human behaviour. If Man has evolved from the animals, many people feel that it is important to know whether his nobler, more 'selfless' characteristics are ingrained deep in his biological past, or whether they are comparatively recently acquired qualities that could readily be sloughed off.

First, we must decide whether the idea of animals being altruistic is not just an illusion arising from an anthropomorphic perspective. Take the case of the cannibalistic caterpillars of which we have already spoken. At a certain stage, they drop from the leaves of the wild thyme on which they live to the ground below. There they are defenceless and easily spotted by any passing predator. Death comes quickly unless they are carried off by a particular species of ant to its nest.

The advantage to the butterfly of its



relationship with the ant is obvious enough. But why the ant, on the other hand, should bother to rescue the young of an alien species is a more difficult question – particularly as, once in the ant's nest, the caterpillars gorge themselves on the ant larvae they find there. The answer seems to be that the caterpillars are the butterfly equivalent of milking cows. They have glands on their abdomens that, when caressed by the ants, produce a milk of which the ants are so inordinately fond that for it they will tolerate even the massacre of their young.

From an outsider's point of view, it seems that the ants are victims of a trick that does them nothing but harm. But they are certainly not doing it out of goodness of heart. There is a *quid pro quo*, and the ants make the most of it. Many other examples of the way different species co-operate confirm that altruism never enters the relationship.

### Dangerous ruses

Clearly, if altruism does exist in the animal world, it is not generally in the behaviour of one species towards another. We must look for it elsewhere – in the behaviour of animals towards others of their own kind for example. Here we seem to be on surer ground. Female otters, for example, will fearlessly attack anything threatening their young. And mothers of many other species show a similar disregard for their own safety. Birds, for instance, employ a number of dangerous ruses, of which the broken wing tactic is the best known. In addition, they spend hours cosseting and otherwise nursing their babies through the vulnerable juvenile stages. So if altruism is defined as behaviour contributing to another's welfare without regard for one's own, then surely this is altruism?

Not so, say biologists. In thinking about the natural world we must never forget the terms on which it is run. Because natural selection favours those who leave most offspring, every female is an entrant in a contest in which success is rated solely by the number of children she raises.

It may seem sad to reduce something as genuinely heartfelt as the love of a mother for her children to a calculated plan for personal reproductive success. But that is the way biologists look at it. In his book *Descent of Man*, Charles Darwin wrote, 'No instinct can be shown to have been produced for the good of other animals.' And mother love is apparently no exception to this harsh rule: survival of the species is all important.

But if this is so, how about a more extreme example: females who look after other females' children – the nannies of the animal world? Foxes, for example, live in groups in which one dog consorts with a variable number of vixens. Only one of these females breeds at a time, the rest seeming to be subject to some sort of psychological birth control that prevents them coming on heat.

Like dutiful maiden aunts, however, the



## A life and death struggle



1



6



2



7



3



8



4



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5



10

Is the death of an individual animal merely an interruption of the pattern of the herd's daily life? This remarkable series of photographs, taken by Horst Munzig – and witnessed by Dr Harvey Croze – in 1979, of the death of a cow elephant in Tanzania's Serengeti National Park seems to show that some animals, at least, have recognisable emotions.

**1–3** In the early afternoon a cow elephant, mortally ill with a virus infection, distances herself from the herd. Suddenly she collapses and instantly the whole herd turns towards her, showing every evidence of concern. Her mate, a large bull elephant, trumpets desperately as he rushes to her side. The herd begins to form a protective circle around her, milling about in obvious distress.

**4–6** The bull pushes himself forward and, bracing himself against the bulk of her body, vainly tries to raise her to her feet. But she does not respond. He then tries to feed her with clumps of uprooted vegetation, but she is past interest in food. He turns next to the stimulus of sex, trying 11 times to mount her – presumably attempting to raise a glimmer of life in her. And touchingly, a two-year-old calf, perhaps her own, tries to nuzzle her into life – again without success.

**7–10** The cow sinks into her final death throes and gradually the herd moves away. Only the bull remains by her side, apparently in genuine grief and despair. As dusk falls her immediate family return to smell the corpse – which has turned noticeably pale in the two hours since death – and circle her body. They trumpet in salute, then slowly depart. Again, the bull elephant remains to guard his mate, then as night settles in he, too, moves off, leaving the dead elephant to the scavengers of earth and air



non-breeding females help to bring up the cubs by playing with them and even bringing them food. Jackal females have recently been shown to do the same, while bees and ants also care for the progeny of their queens. But bees take things a step further. As well as taking care of the young, the sterile females are also prepared to die for them.

As is well-known, a worker bee's ovipositor is loaded with poison and forms an effective weapon. But the price of deploying it is great. Most of the bee's insides are ripped out with the sting, and the disembowelled bee soon dies. The rise of this extraordinary kamikaze technique in defence of the hive must by any definition be judged altruistic, so the question now becomes: how did such behaviour evolve in an environment of ruthless one-upmanship?

On this question there are at least two schools of thought. One – propounded by Professor V.C. Wynne Edwardes of Aberdeen University and popularised by the journalist Robert Ardrey – holds that the individual is less important than the group, and that it is the good of the group or species that determines the course of evolution.

This manner of determining which traits are perpetuated sounds perfectly reasonable in theory. It is obviously good for foxes in general if sterile vixens help the fertile ones bring up their young. Similarly, the honey bee benefits as a species from the ability of some of its members to drive off intruders.

But things are not so neat in practice. Communal good seems to be a very alien philosophy in the animal world and, most important, natural selection can act only on the individual (and the genes he carries), and not on the group.

Like many other characteristics, a sting is genetically inherited and, even though it is indisputably an advantage to the group, the genes specifying it are lost when the worker uses it. So how is such a trait perpetuated? On this Professor Wynne Edwardes and his followers have nothing helpful to say. For them, too, the mechanism of altruism remains a mystery.

The fact remains, nevertheless, that worker bees *do* have stings and maiden foxes

Below: the tiny oxpecker bird perches on the rhinoceros's horn, about to feast off the ticks that infest the huge beast's hide. This is a perfect example of co-operation between species – the bird thrives on the parasites that would otherwise plague the animal

Bottom: jackals, vultures and hyenas scavenge for meat from the carcase of an animal that has been killed by another predator such as a lion. A case of co-operation – or simply of opportunism?



*do* take part in child-care. So if Professor Wynne Edwardes's 'biological communism' isn't an adequate explanation for their behaviour, what is? The second group of thinkers remains closer to classical Darwinism. The most radical of its proponents, however, maintain that it is not individuals that are operated on by natural selection, but genes.

According to Richard Dawkins, author of *The selfish gene*, our bodies are simply survival suits for our genetic code. He transmutes the idea that every individual wants to leave as many genes as possible to the next generation to the notion that each *gene* wants to leave as many copies of itself as possible.

### Enlightened self-interest

The same is true in the case of sterile foxes. The idea is that they, too, are imbued with the desire to perpetuate themselves, and even if babies are ruled out, all is not lost. The chances are that, like the workers in a colony of bees, they are related; they have genes in common both with the mother and with the cubs they are tending.

What is more, the proportion of genes they have in common can be calculated. In normal circumstances your niece or nephew will share, on average, 25 per cent of its genes with you as opposed to 50 per cent for your son or daughter. This means that if by your actions you can ensure the survival of double the number of nephews, you need not bother having children. The same end will have been achieved by different means. In hymenoptera (ants, bees and wasps), owing to an odd way of determining sex – the males have only half the number of genes that the females have – the odds are even better. And this is why, experts maintain, altruism and social organisation are to be seen so extensively in this particular group.

So it seems as though, after all, even the maiden foxes and the worker bees are acting for their own good. They have found a way of perpetuating their genes without the trouble of childbearing. To the romantic it is all rather disillusioning. But just how far does the selfish gene theory hold? Certainly it fails to explain the loyalty and self-sacrifice of Greyfriars Bobby. Moreover, it depends on the very questionable assumption that animals are nothing but complicated machines, and that their inherited behaviour is 'programmed' by genes. But how do the genes come to be 'programmed' in the first place? Can this really just be a matter of chance, as the conventional theory supposes? The 17th-century philosopher Descartes believed that animals were machines without souls. Could it be that today's biological thinkers, in their refusal to recognise that nature is anything more than 'an invisible billiards game played by chance against necessity', are equally wide of the mark?

*Do animals have senses altogether different from our own? See page 1010*



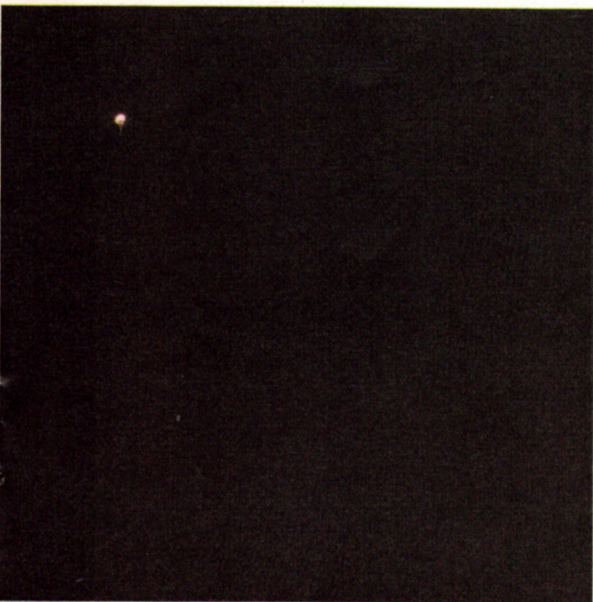


On the evening of 5 March 1979 Antonio Gonzales Llopis, aged 26, was taking photographs of the island of Gran Canaria in the Canary Islands when suddenly he noticed a strange, swirling light in the sky over the sea. A moment later a huge, dark object hurtled out of the sea straight up into the sky, surmounting a ball of fire (1, 2 and 3). Llopis pointed his camera at the object, checked its setting and continued to take pictures throughout the sighting, which he estimated lasted about three minutes – later verified by several other witnesses.

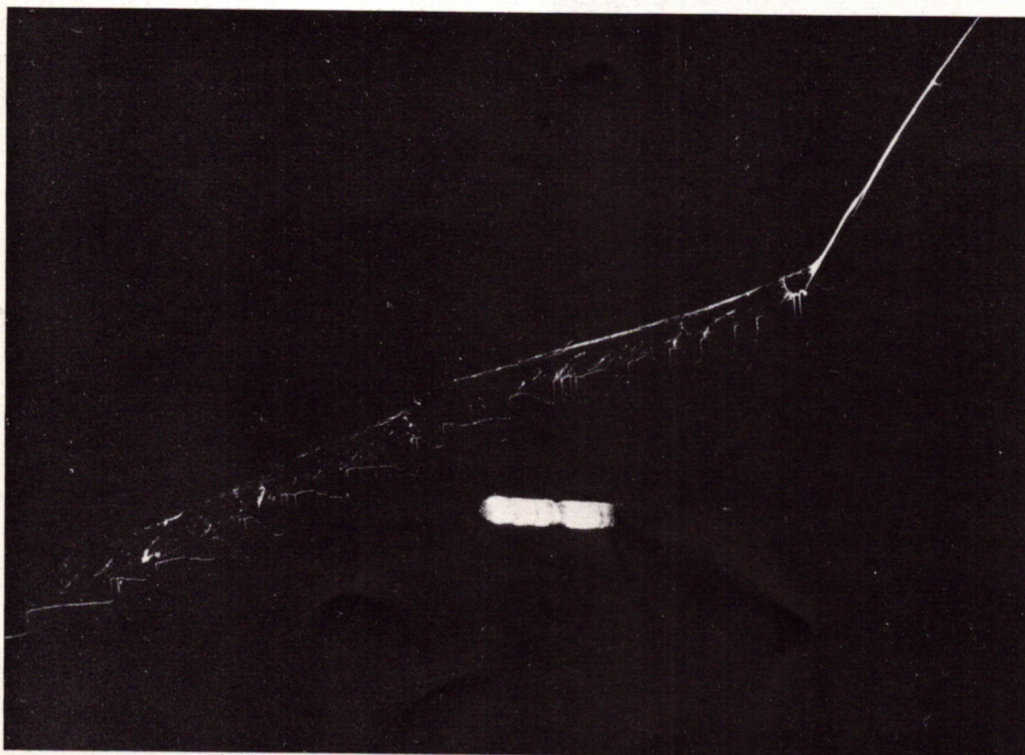
The brilliant light surrounding the dark object effectively obscured any detail, but it seemed to accelerate rapidly, shooting 'through' the pattern of lights in the sky. After the object had disappeared a bright trail and a golden cloud illuminated the sky for half an hour (4 and 5). Thousands of people on Gran Canaria reported the incident and many of them took photographs. Some of these found their way into the files of the Spanish government, which is, however, increasingly sympathetic to serious UFO investigation.







Right: bright lights seen near the major airport of Barajas, 6 miles (10 kilometres) from Madrid, Spain, one night in December 1979. An estimated 10 lights appeared suddenly over Madrid, executed a brief aerial ballet then sped off in the direction of Barajas, where this photograph was taken. UFOs seem to be fascinated with airports and aircraft, naval bases and ships, nuclear power stations and military establishments of all kinds. Believers in the extra-terrestrial hypothesis claim that the UFOs are aliens showing an interest in the hardware of our technology to compare our progress with theirs. More down-to-earth observers suggest that UFOs are in fact secret weapons accidentally seen while undergoing trials in the vicinity of the military bases from which they came.



Left: photograph of a UFO seen near Lakeville, Connecticut, USA, on the night of 23 January 1967, and taken by a 17-year-old pupil from a local boys' boarding school. This was only one of the many sightings of 'bright lights moving erratically' reported over a four-month period, mainly by boys from the school, although one teacher and a 12-year-old boy who lived nearby added their testimony. Condon Report officers Ayer and Wadsworth investigated and studied the student's picture. The boy described the UFO as 'a bright point of light that blinked or pulsated regularly'. He said it 'pulsated twice' then disappeared behind Indian Mountain. The investigators left the case open – but could the UFOs have been secret weapons undergoing night trials? Or were they really 'nuts and bolts' alien spacecraft?



# A force to be reckoned with

Many UFO sightings are heralded by the erratic behaviour of electrical equipment and the failure of car engines. What forces could create these disturbances? Are they deliberately produced, or are they mere side effects of the UFOs' passing? CHARLES LOCKWOOD reviews some notable cases and the theories proposed to explain them

THE EVENING OF 2 NOVEMBER 1957 was an eventful one for Patrolman A. J. Fowler, on duty at police headquarters in the American town of Levelland, in Texas. At about 11 p.m. he received the first of several puzzling telephone calls. It was from one Pedro Saucedo, who had been driving 4 miles (6 kilometres) west of Levelland with a companion when a torpedo-shaped, brilliantly lit, yellow and white object approached the truck at high speed. As the object passed close overhead the truck's headlights went out and its engine died. The object gave off considerable heat and when Saucedo got out of the truck to look at it he had to drop to the ground. As the UFO moved into the distance the headlights came on again and the engine was easily restarted. The two men drove for

Right: a luminous sphere hangs over the Spanish island of Gran Canaria on a June night in 1976. This photograph is one of a series of 36 of this UFO. During other sightings made that night, presumably of the same object, a radio and a television set cut out

Below: the UFO that was seen by Pedro Saucedo near Levelland, Texas. While it was nearby the engine and headlights of Saucedo's truck failed



some distance before telephoning the police. However, Officer Fowler attached no importance to the call.

An hour later, a man telephoned from 4 miles (6 kilometres) east of Levelland (in the direction in which the first object had been travelling) and told Patrolman Fowler that he had come upon a brilliant egg-shaped object about 200 feet (60 metres) long, sitting in the middle of the road. As the car approached, its engine failed and the headlights went out. The witness said that the object was lit up like a large neon light and threw a bright glare over the whole area. When he got out of his car the UFO took off and rose some distance. Then its light went out. The car's engine could then be restarted.

A short time later Officer Fowler received another call. Another motorist had been stopped by a glowing object sitting in the road. His engine and lights had failed.

Soon after midnight Newell Wright was driving towards Levelland when his car ammeter began fluctuating, the engine died, and the lights went out. He got out to look at the engine, but found nothing apparently wrong with battery or wiring. He then noticed an oval object on the road ahead, similar to those of the previous sightings.

During the next hour at least four more similar reports came in. A fire marshal spoke of a red light that he saw in the sky as his





Above: a Curtiss C-46 of Brazil's Varig Airlines. An aircraft of this type suffered severe electrical disturbance during a UFO sighting in 1957

Below: east of Levelland, in the second incident of 2 November 1957, a UFO straddling the road caused a vehicle to stall

vehicle lost power and its lights went out. A similar red light was reported by a sheriff and his deputy.

That November night in Levelland was exceptional. But people in all parts of the world have reported similar puzzling events at various times. The vehicle faults that have sometimes been described as occurring when a UFO has been observed have included static on the radio, rough running or complete failure of the engine, wildly fluctuating instruments, headlight failure and even severe damage to the wiring of a vehicle. In most cases the driver has been able to restart the engine when the object has left the area. In a few cases the drivers or passengers have been very shocked and have referred to strange sensations of heat or static electricity, or to unusual odours.

Vehicle interference cases are examples of close encounters; generally they are of the second kind, in which there are effects on the environment, but no alien beings are reported. However, in one listing of 400 cases, over 60 included reports of humanoids, and are thus classed as close encounters of the third kind.

Sometimes a vehicle is permanently damaged; scientists then have a physical change to study, and not merely the observer's account of what he thought happened. However, before the vehicle damage is accepted as

UFO-related we have to establish that the report is not a hoax, and that the UFO was not really a man-made or natural object. It is believed by many researchers that a few cases of damage may have been caused by ball lightning. But the value of this explanation is questionable since scientists are as baffled by ball lightning as by UFOs (see page 218).

Aircrew have noticed disturbances to electrical systems during UFO sightings. On 4 November 1957 a Varig Airlines C-46 on a flight between Porto Alegre and São Paulo,







Brazil, encountered an unusual object. The pilot and co-pilot saw a red light moving quickly towards them. Suddenly the object seemed to jump through an arc of 45° and grow larger. There was a smell of burning rubber in the aircraft and the direction finder, a generator and the radio transmitter burned out. The object then disappeared almost instantaneously.

Boats have been involved, too. At about 3 p.m. on 15 December 1968 at Hawk Inlet, Alaska, two men on board the cargo boat *Teel* observed a round, white light moving slowly towards them. At 7 p.m. the object was still visible, apparently floating on the water. Then it rose and flew away over a nearby mountain ridge.

On the following evening the same strange light was seen again. It moved slowly until it was directly above the *Teel's* mast, at a height of about 70 feet (21 metres). There was no sound. The *Teel's* crew contacted Elmendorf Air Force Base and the coastguard by radio. After about five minutes the boat's power and radio went dead. An auxiliary diesel power generator hesitated and showed signs of failing; then the object moved away and the generator began to function normally. The object disappeared from view after 15 minutes. An American scientist, Dr James Harder, suggested that the UFO may have been short-circuiting the electric generator in some way, giving the diesel engine so much work to do that it nearly stalled.

Many people call these 'electromagnetic' effects. However, this does not help to explain them and begs the question of their causes. In fact, modern physics cannot explain many of the effects that are reported. For example, it has been argued that UFOs must emit a powerful magnetic field, which affects vehicle instruments. But if this is so, it

is a very precisely controlled field.

We see very specific interference in a report from Iran. On 18 September 1976 an unidentified object was spotted by officials in the control tower at Mehrabad Airport, Tehran, and two Phantom jets of the Iranian Air Force were sent up to investigate. The pilots described the object as round; as they approached, it accelerated to many times the speed of sound and then turned to chase the jets for a short time. When the pilots rashly tried to open fire the electronically operated gun controls failed to respond. The aircraft's electronic systems, including radio, would not operate within 3 miles (5 kilometres) of the object.

To summarise: there have been many cases since the Second World War of disturbance to vehicles when UFOs are nearby. In addition to apparently electrical and magnetic effects, drivers and passengers have reported air pressure changes, temperature changes, temporary paralysis, 'sunburn', and other mental and bodily changes.

There is much loose talk about the causes



Top: an unidentified floating object. At Hawk Inlet, Alaska, the crew of the cargo boat *Teel* observed a white light for two successive nights. It apparently affected the boat's electrical systems and diesel generator

Above: a Phantom of the former Imperial Iranian Air Force. The sophisticated electronic gun control systems of one of these supersonic fighters failed at the moment when its pilot was trying to fire on a UFO, and other electronic systems were disturbed

## Mind over motor

The links between UFOs and traditional 'psychic' phenomena have been explored extensively in recent years. Among the disturbances produced by poltergeists – disturbances that may originate in the minds of victims – electromagnetic effects are relatively rare, but not unknown. One young woman who had been adopted as a baby had the traumatic experience, only a week before her marriage, of meeting her real mother. On her return home that evening she switched on all the lights. One by one all of them 'blew' – some literally



of these apparent disturbances. Ufologists speak of 'intense electromagnetic fields' as being responsible. A small amount of research has been carried out, and is still proceeding, to put some substance into these speculations.

One official investigation that is widely known was carried out for the Condon Committee (see page 6). A team studied the effects of strong magnetic fields on the patterns of magnetism in car bodies. They found that during manufacture, cars acquire magnetic fields that are a record of the Earth's magnetic field at that time and place. In normal conditions, this pattern of magnetism does not change, and will be identical for all cars of a given model and year.

When the investigators subjected a car body to a changing magnetic field, by passing magnets over it, they found that the pattern of its magnetisation was changed. They concluded that any car that was subjected to a magnetic field intense enough to cause it to malfunction would carry an altered pattern of magnetisation as a consequence.

Two cars that allegedly malfunctioned during UFO sightings were studied: in both cases it was found that their magnetisation patterns had not changed since their manufacture. The cause of the disturbance could not have been an intense magnetic field.

#### Duplicating the effects

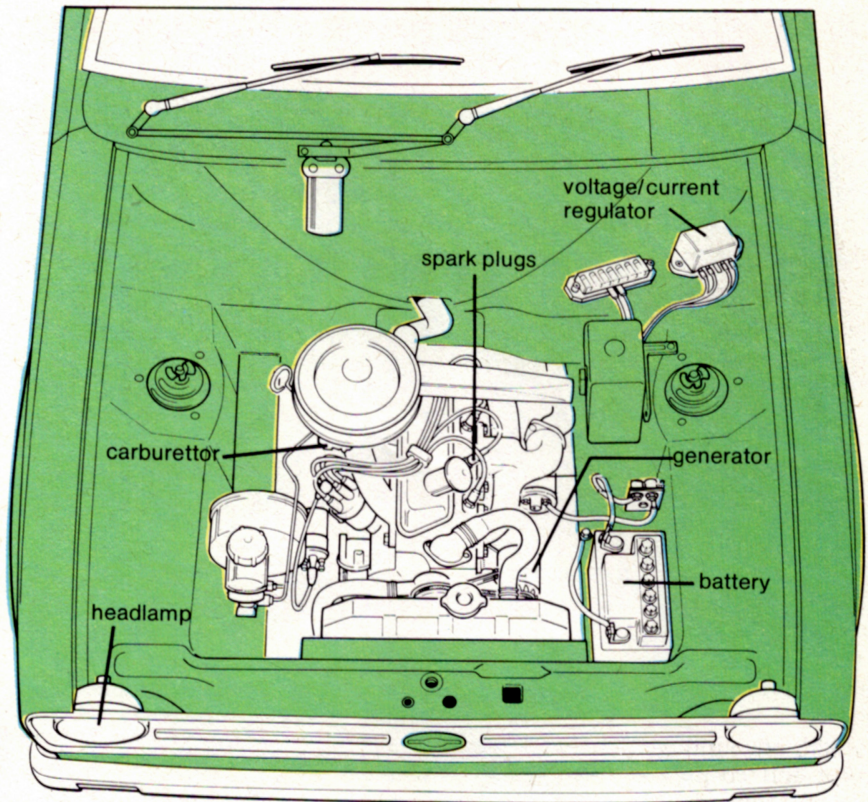
This is not to say that magnetic fields could not be important in other cases. Very few cars involved in UFO sightings receive the thorough study that is needed to establish how and why the effects are produced.

A team set up by the British UFO Research Association has made some small-scale experiments on the effects of magnetic fields. One interesting finding is that the current-voltage regulator of many cars can be disturbed by comparatively low-strength fields. However, with the bonnet down, the body of a car is an effective magnetic shield: extremely high field strengths outside the car would be needed to produce even weak fields

exploding. This event, resembling poltergeist phenomena, may have been related to her distraught state.

Electromagnetic effects are among the psychokinetic (PK) phenomena that have been induced in the laboratory. At Aston University, Birmingham, in England, the parapsychologist Julian Isaacs has found that such effects are more likely to occur when his subjects are more likely to occur when his subjects are exposed to a picture of a baby, or to the word 'baby' – for reasons not yet apparent.

If UFOs are productions of the minds of those who witness them – though none the less real for that – then the same must be true of associated effects, such as vehicle breakdowns.



Above: the parts of a car engine that have been tested to discover their susceptibility to disturbances from external sources include: the battery; the generator, which recharges the battery; the spark plugs, which ignite the fuel; and the voltage-current regulator. Power can be drained from the battery through the headlights by microwave radiation, according to one ufologist, while reduced air pressure would disturb the engine by impairing the carburettor's functioning

inside the engine compartment.

Other causes of vehicle disturbance that have been suggested include microwaves, which could cause heating of car components, and intense ultraviolet light, which could release electrons in the metal of the car body and give rise to stray voltages and currents (and could perhaps be associated with the skin burns reported in some cases).

One of the oddest suggestions, though one that has been carefully worked out, is that microwave radiation could affect tungsten headlamp filaments in such a way that large amounts of current could be drained from the battery, causing the engine to stall.

However, a drained battery will not function again until it has been recharged, whereas in many cases, such as those described above, the car engine has restarted immediately upon the departure of the UFO.

UFO research organisations, underfunded and dependent on their members' voluntary efforts, cannot mount the major investigations that would be required to discover physical effects capable of bringing a vehicle to a stop and dousing its headlights. But we may be sure that official circles with more ample resources take an intense interest in this question. The military could not fail to be interested in the possibility of a 'vehicle-stopping' ray – especially if it were effective against heavy trucks and tanks, or even aeroplanes. And they would be neglecting their duty if they did not concern themselves with means of defence against what is potentially such a valuable weapon (see page 1026). But the results of their research have not seen the light of day.

#### Further reading

Edward U. Condon, *Scientific study of UFOs*, Bantam (New York) 1969  
J. Allen Hynek, *The UFO experience*, Corgi 1979  
Charles F. Lockwood and Anthony R. Pace (eds), *Vehicle interference project*, British UFO Research Association 1979



# Mammoths—alive or dead?

**Occasionally, reports of mammoth sightings in the vast uninhabited forests of Siberia reach the outside world. And many scientists, too, admit that, somewhere, mammoths may survive — as FRANK SMYTH explains**

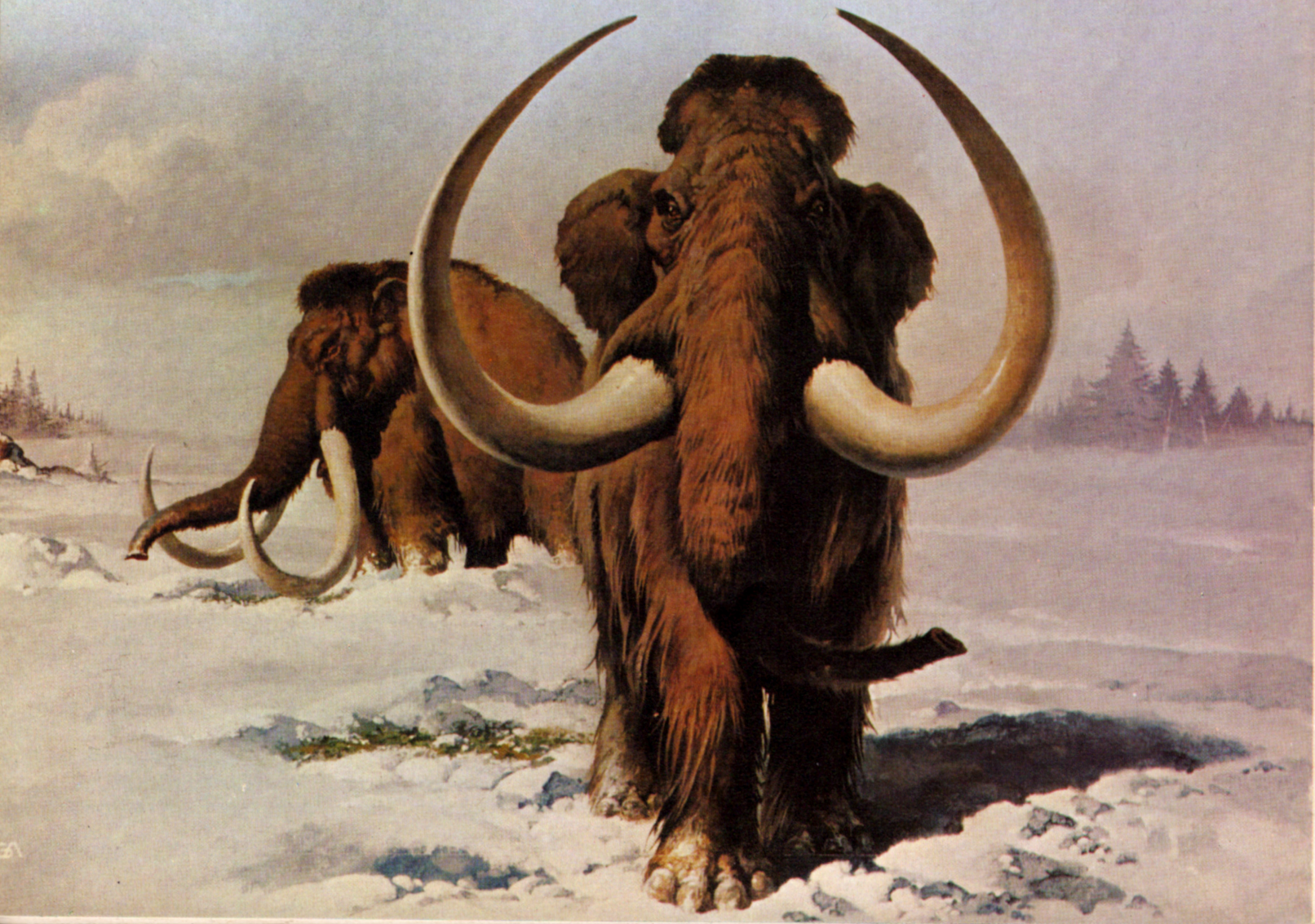
THE MAMMOTH REMAINS found at Berezovka gave scientists a fascinating wealth of new material to work on. Yet one fact remained puzzling: the unswallowed grass and flowers in the creature's mouth indicated that it had met a sudden death — but how?

The autopsy provided the answer — and Dr Hertz, leader of the expedition, believed that many other mammoth deaths must have occurred in the same way. A rigorous analysis of the creature's stomach contents showed that it contained grasses, mosses and lichens of various kinds, plus the green branches of such tundra trees as fir and pine. The presence of certain seeds showed that death had occurred in autumn. The unchewed buttercups indicated that the mammoth must have come to sudden disaster. From the findings of the geologist, all the evidence seemed to point to the conclusion that the mammoth had been browsing when it stepped onto thin

An artist's impression of the woolly mammoth, made on the basis of discoveries of remains in northern Siberia. The mammoth's habitat was probably midway between the barren tundra of the present-day Arctic and the wooded *taiga* of slightly more southerly regions. But the *taiga* would give it all the food — and cover — it would need to survive. Could mammoths still be alive in Siberia?

ice and plunged into the shallow ravine, breaking its leg and pelvis. Thrashing about, it had pulled down tonnes of snow and semi-frozen slush from the sides of the banks and had suffocated. An interesting fact was that parts of the body had undergone the adipocere change, a hardening of the normally semi-liquid body fat into a sort of suet that, once set, remains almost permanent. This condition occurs when a body — whether human or animal — has been immersed in water or buried in a damp environment (see page 817).

Since then, a number of other partially preserved carcasses have been found in the permafrost belt. In 1948, for instance, excavations with a high-pressure hose in Alaska uncovered the head and forequarters of a baby mammoth, while an even better specimen than the Berezovka example came to light in the same district — Yakutsk — when a road was being bulldozed through the area in the summer of 1977. The body was that of a six-month-old animal and, as its trunk was intact, experts were able to note for the first time the two distinct 'fingers' at the end of the trunk — apparently used for delicately







Left: the perfectly preserved body of a six-month-old mammoth, 'Dima', found in the permafrost at Yakutsk, Siberia, in the summer of 1977



picking up small objects in the manner of modern elephants, although the lower 'finger' of the mammoth could also act as a flap to shut out the cold from the nostrils.

The 1977 mammoth had died in a similar way to the 1900 one and, as Hertz pointed out, such deaths must have come regularly to the bulky beasts. But, sceptics argue, surely not all mammoths could have died in such a way. The 'catastrophist' school of thought maintains that a colossal catastrophe causing an abrupt change in temperature froze up the Siberian wastes and thus deprived the mammoth of its food. This theory was first promoted at the beginning of the 19th century by the French naturalist Georges Cuvier, generally regarded as the father of modern palaeontology, the study of fossils. The main body of modern science, however, disagrees with catastrophism. One objection is that Cuvier based his hypothesis on an erroneous interpretation of the 'gaps' of millions of years between fossils found in one rock stratum and those found in an adjoining one. The state of geological knowledge in his day was such that scientists did not realise that volcanic and other upheavals in the Earth's surface could jumble strata in a confusing way. In any case, no such gaps in the fossil record had occurred in Siberia since the decline of the mammoth. Nor, as Hertz showed, had the vegetation changed much since the Berezovka specimen died in the act of ingesting buttercups.

The most reasonable explanation for the extinction of the great herds lies not in a sudden temperature change but in a series of particularly hard winters. The mammoths were migratory animals, wandering slowly south in the winter and back north in the spring. Their curious inward-curving tusks were almost certainly used as snow-ploughs to scrape off the top surface of the snow and expose the lichen and grass below. The

Right and below: tests showed that Dima, the baby mammoth, had probably died by stepping onto thin ice. The carcass was in such excellent condition that two 'fingers' could be clearly seen at the end of the trunk; these had been used for picking up small objects, and for shutting off cold air from the nostrils







occurred on Akpatok Island in Ungava Bay, Canada. This large island had always swarmed with reindeer, but one winter, when the snow was deeper than usual, rain fell upon it (an almost unprecedented occurrence) and formed a heavy and permanent crust over both the bare ground and the snow, thus preventing the deer from obtaining their food. The consequence was that the whole number perished, and the island has never been re-stocked. If this former great herd had comprised the whole species then living, the reindeer would now be extinct.

Bell also mentioned the huge number of mammoth bones found clumped together around the shoreline of Siberia, particularly in the mouths of such rivers as the Lena. He pointed out that in his own time, before the buffalo were all but wiped out by hunters, great herds of them had been known to drown when they attempted to cross frozen rivers on ice that was not strong enough to bear their weight. And the mammoth was much heavier than the buffalo.

All these theories – plus the less convincing one that prehistoric man hunted the animals to the point of extinction – may have some bearing on the disappearance of the woolly mammoth. But one tantalising improbability remains: are the beasts really extinct?

The great forest of Siberia, the *taiga*, extends over 3 million square miles (7,770,000 square kilometres) and, apart from a scattering of nomadic and primitive hunters, is uninhabited. In 1581 Ermak Timofeyevich, captain of a Cossack band sent into Siberia at the beginning of Russia's conquest of the territory, reported that one of the first things he and his men saw on the east side of the Ural range was 'a large hairy elephant'. The natives expressed no surprise, and told him that it was known by a name meaning 'mountain of meat'. This was, of course, a full century before the Dutch diplomat and explorer Evert Ysbrandt Ides

beasts could certainly live in extreme cold, with their matted hair, small ears – designed to conserve body temperature, unlike those of their modern cousins in Africa, which disperse it – and fatty humps that, like those of the camel, stored energy. But in a bad winter or frozen spring, the browsing animals might not have been able to scratch deep enough for food. If such conditions recurred over decades or even hundreds of years, the herds would dwindle and die.

Facts back up this idea. Writing in the *Bulletin* of the Geological Society of America in 1898, Robert Bell provided evidence for a similar theory by quoting an event that

Above: the massive bulk of a woolly mammoth, in a model based on remains found in the Siberian permafrost. Why did this animal, after thousands of years of fine adaptation to its environment, become extinct? Or does it, in fact, survive?

How did the mammoths become extinct? Dr Immanuel Velikovsky believes that the mysterious fate of the woolly mammoth provides evidence for his ideas.

Dr Velikovsky believes that the seemingly supernatural events described in legends throughout the world – such as the crumbling of the walls of Jericho in the Bible, or the story of Phaeton in Greek mythology (see page 341) – are accounts of real catastrophes caused by the close approach of comets to Earth.

The disappearance of the mammoths, he claims in his *Worlds in collision*, must have been the result of one of these cataclysms. The mammoths, he argues, 'did not succumb in the struggle for

## A sudden catastrophe

survival as an unfit product of evolution'; many of the best specimens, buried deep in the permafrost, show signs of having died suddenly and – for Velikovsky an important point – the kind of vegetation found in mammoth stomachs no longer exists in Siberia. Velikovsky claims that these facts argue a sudden cataclysmic change in climate. But the argument is by no means conclusive – particularly as Velikovsky gets one of his facts wrong. Plants very similar to those found in the mammoth stomachs are found in Siberia today – a fact that raises a possibility even more fascinating: perhaps mammoths are not extinct after all.



## Mammoths in Britain



Most of the important discoveries of mammoth remains have been found within the Arctic circle. But there is at least one discovery of British mammoths on record: that found near Avely in Essex in 1964.

The find was made in a clay-pit and consisted of two skeletons, lying at almost the same spot, within a foot (30 centimetres) of each other. The lower skeleton was of a straight-tusked elephant – a creature that was present in Britain during the warm periods between successive cold phases of the Ice Age. The other skeleton, buried in a layer of peat, was of an early form of mammoth, and an ancestor of the woolly mammoths whose remains have been discovered in Siberia and Alaska. As well as bones, both its tusks have been found; they can be seen clearly in the photograph (top right). One tusk is complete, though broken; the other is only about 6 inches (15 centimetres) long, and worn, indicating that the mammoth broke it off during life. The remains are estimated at between 100,000 and 200,000 years old – a little older than the hippopotamuses that, another find has shown, once roamed the site of Trafalgar Square.

(see page 943) suggested that the *mamontovakosty* came from an elephant-like creature.

But a much more impressive story was reported by a respected French diplomat named Gallon in 1920. Gallon was stationed in Siberia at the time, and began talking to a Russian peasant, a hunter who had spent four years in the *taiga* shooting bear and wolf. In his second year in the forest, he told Gallon, he found

a huge footprint pressed deep into the mud. It must have been about two feet [60 centimetres] across the widest part and about eighteen inches [45 centimetres] the other way . . . not round but oval. There were four tracks, the tracks of four feet, the first two about twelve feet [4 metres] from the second pair, which were a little bigger in size. Then the track suddenly turned east into the forest of middling sized elms. Where it went in I saw a huge heap of dung; I had a good look at it and saw it was made up of vegetable matter. Some ten feet [3 metres] up, just where the animal had gone into the forest, I saw a row of broken branches, made, I don't doubt, by the monster's enormous head as it forced its way into the place. The hunter followed the trail and, some days later, found that another had joined it, just like the first one.

The wind was in my face, which was good for approaching them without them knowing I was there. All of a

sudden I saw one of the animals quite clearly, and now I must admit I really was afraid. It had stopped among some young saplings. It was a huge elephant with big white tusks, very curved; it was a dark chestnut colour as far as I could see. It had fairly long hair on the hindquarters, but it seemed shorter in the front, I must say I had no idea there were such big elephants . . . the second beast was around; I saw it only a few times among the trees. It seemed to be the same size.

The hunter's gun, though suitable for taking bear, was not, he judged, of heavy enough calibre to take on such monsters. He crept away and returned to his winter quarters, terrified by what he had seen.

'Such,' concluded Gallon's report, 'was the tale of this man who was too ignorant to know that what he had seen were mammoths. And when I told him the name, he did not show the least sign that he understood what I meant.'

In view of the fact that no scientist has come up with a totally satisfying explanation of why the woolly mammoth should have become extinct, and considering that its staple diet as revealed in the stomach of the Berezovka mammoth still flourishes in Siberia, and taking into account Gallon's testimony – there still exists the faint but real possibility that a few of the hairy giants are still lumbering among the vast and largely unexplored Siberian forests.

### Further reading

H. Gwynne Vevers, *Elephants and mammoths*, Bodley Head 1968

Angus Hall, *Monsters and mythic beasts*, Aldus 1975

Francis Hitching, *The world atlas of mysteries*, Pan 1979



# The healer within



**Can the mind rid the body of illness? Modern techniques of auto-suggestion indicate that the mind does indeed have great power over the condition of the body. BRIAN INGLIS explains**

ONE OF THE MOST EXCITING developments in the history of healing is the growing recognition that the mind can influence, even control, the functions of the body. But since the 1960s the emphasis has been on redefining 'mind': for if this implies only the ordinary, everyday process of thinking then it is ridiculous to believe that it can make even minor changes in one's body. 'Which of you by taking thought,' Christ asked during the Sermon on the Mount, 'can add one cubit unto his stature?' And most people would agree that this is indeed impossible.

Primitive, tribal communities have always realised that if 'mind' includes the emotions then miracles can happen – through 'mind' power alone. A standard method of tribal healing is to put the sick person into a trance, which frequently culminates in convulsions. In this uninhibited state the subject can release his repressed feelings and tensions – 'let out the unclean spirits'. In most cases, it seems to work. This ancient, ritualised trance method is now back in vogue in our 'sophisticated' society as the foundation of many cults and encounter groups.

In fact, Christ's own method of healing relied to a certain extent on the same 'shock-release' principle, although judging by the Gospel accounts he had no need to induce trances. His approach was simple, even blunt. 'Take up thy bed and walk' – spoken



Top left: Christ heals the paralytic at Capernaum with the words 'Take up thy bed and walk' – a blunt command that, some say, suddenly activated the man's own powers of healing

Top right: Emile Coué in 1923. He popularised the concept of auto-suggestion

Above: Coué teaches the sick to 'imagine themselves well' – successfully

with what one must assume was considerable authority – shocked the victims of paralysis so profoundly that their 'useless' limbs were literally galvanised into action. Sick people were shown in the most immediate way that they could, after all, exercise control over their bodies. All they needed was a powerful enough stimulus.

Frequently the exhortation to rise from their sick beds was prefixed by the phrase 'thy sins are forgiven thee', an enormously potent reinforcement in the 'shock' healing method. Exorcism also followed this pattern (and still does), as did 'stroking', the secular version of the Church's 'laying on of hands'.



Whereas Christians assume that there is a divine force, manifested through the Holy Spirit, that can restore health by casting out unclean spirits, believers in 'stroking' relied on a belief in 'magnetism' (see page 901). Both methods stressed that it was an outside force – the Holy Spirit or some kind of magnetic 'fluid' – that worked the miracle.

But during the 18th century miracles came to be regarded with suspicion, and although Mesmer's animal magnetism retained the traditional healing principle (inducing trances and convulsions), it could not win orthodox medicine's acceptance. Its successor, hypnotism, was also to emphasise that patients were not responsible for their own recovery. The hypnotist alone, it was thought, was instrumental in effecting the cure, through the power of suggestion.

However, there was an interesting development; in the 1880s one of the visitors to Professor Bernheim's pioneering hypnotherapy sessions at Nancy in France (see page 901) was a young French chemist, Emile Coué. Coué had been impressed by the curious phenomenon of his customers



1875 and is now a thriving, world-wide organisation. Mrs Eddy had basically the same idea as Coué but turned it into a religion. To her it seemed logical that if God's mind is omnipotent and perfect then it can only conceive of perfection. Imperfections, such as illness, must therefore be illusions created by the sinful mind of mortal Man. If he would only repent and turn to the Lord, Man would become healthy, both spiritually and physically.

Coué, however, thought in more mundane terms. He understood that most people need help to activate their imaginations. So in the 1920s he popularised the saying 'every day, in every way, I get better and better'. It was not designed to express the *will* to 'get better'; it was simply an incantation, a ritual aid to be used daily in 'programming' one's imaginative faculties.

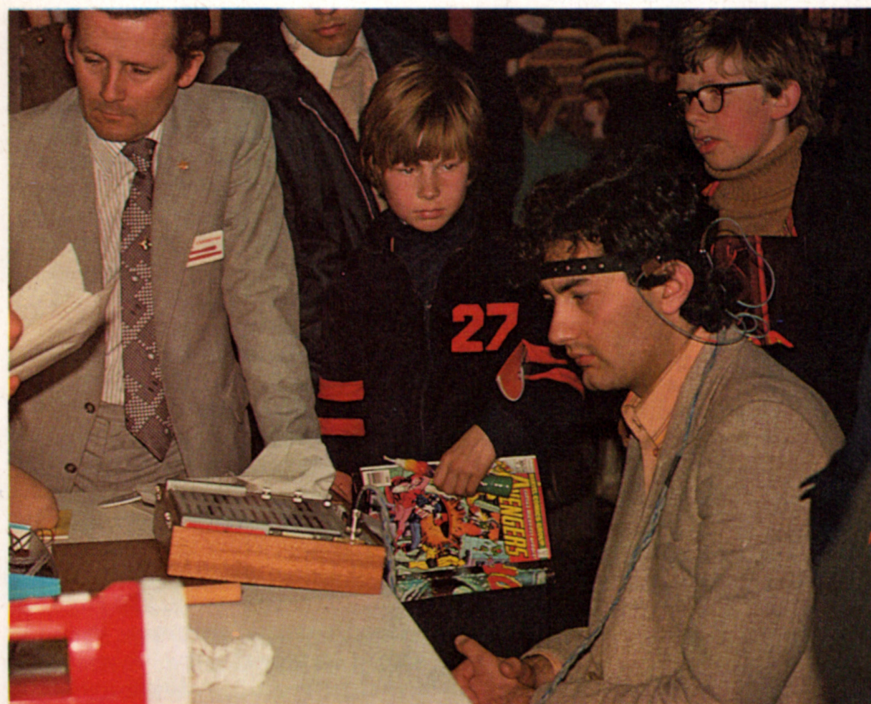
### Raising the blood pressure

But the medical establishment would have none of him and his 'gimmickry'. Medical students were being taught, as ever, that organic ailments had organic origins; the imagination had nothing at all to do with it. More than that, they were being taught that the imagination had no effect even on the autonomic nervous system. Although even they had to admit that fear, or love, could make the heart beat faster or raise the blood pressure, they took refuge in the fact that it did so only temporarily. To them it was quite simple: the mind could not exercise effective long-term control over the body.

But ironically, just when Couéism was losing popularity, certain evidence came along that proved it right. Two young British cardiologists, William Evans and Clifford Hoyle, were conducting tests on the efficacy of various brands of drugs used in the treatment of angina at a London hospital. To make sure the tests were fair, they divided the 'guinea pigs' into two groups, both of which were told they were taking the same drug. But only one group was taking it, while the other was taking bicarbonate of soda – and the latter 'drug' was most successful.

Why? The most obvious answer was that this was a classic case of the 'placebo effect' – the effect Coué had observed when his customers had been cured by drinking coloured water, believing it to be real medicine. And now these hospital patients showed marked improvement after taking fake pills, believing them to be the real thing. Groping for an acceptable explanation for this phenomenon, orthodoxy came up with the theory that the placebo effect is inherent in some people's make-up. Having decided this, it would consequently have to be allowed for in all other drug trials – but was ethically unthinkable to be used as a form of treatment by itself. And so the dogma that the mind played no significant role in either causing or curing illness remained firmly established.

By the end of the 1960s it had finally been



who were cured by drinking what they believed to be medicine – but was in fact only coloured water. Coué had discovered the secret: auto-suggestion.

He also realised that it was not a question of sick people *willing* themselves to get well. His customers who recovered after drinking coloured water were, after all, not exercising their will-power or making any kind of conscious effort. It was their imagination that was being activated.

In effect, this was the secular version of Christian Science. This religion was founded by Mary Baker Eddy at the same time as the launch of her book *Science and health* in

Top: Mary Baker Eddy (1821–1910), the American who founded the Christian Science religion. She taught that disease is an illusion created by the mind of man, a reflection of his inner imperfection that only God can cure.

Above: a student of the biofeedback technique monitors his physiological state before attempting to change it deliberately



## Hypnosis

established that humans could control their own nervous systems, using a technique known as biofeedback. This is auto-suggestion plus hardware. It is quite simple: the students learn how to use machines with which to monitor their reactions (emotional and physiological). If these are positive, then they learn to take full advantage of them; if negative they learn to destroy them.

To take an obvious example: it has long been known that disturbing emotions such as anger can raise blood pressure, so one natural line of research has been to attempt to discover how the angry person can rid himself of his dangerous feelings and replace them with some other, more positive attitude. Using the monitoring device, the biofeedback student can actually see the rise and fall of his blood pressure being recorded as he experiences various moods. After a while, the student can train himself to lower or raise his own blood pressure as he wishes.

But the simplest form of biofeedback training was pioneered by one of Coué's contemporaries, Dr Johannes Schultz. He told his patients to relax and let their imagination have full rein. By imagining that their hands were being dipped in either hot or cold water, they discovered they could raise or lower the temperature of their fingers.

Although Schultz's 'autogenic training', as he called it, never had the popular appeal of Couéism, his disciples went on to develop some of his ideas. One of them, Wolfgang Luthe of Montreal, Canada, was the inspiration behind the work of Elmer and Alyce Green of the Menninger Foundation in Kansas. In *Beyond biofeedback* (published in 1977) they described their research that revealed the remarkable extent of the mind's power over illness, even over cancer.

In Texas, Carl and Stephanie Simonton have employed auto-suggestive techniques in their 'visualisation therapy'. This encourages cancer patients to fantasise vividly that their diseased cells are being dispersed and destroyed. The fantasy employed varies according to the individual patient: thus a



Above: Carl and Stephanie Simonton, who use 'visualisation therapy' to treat cancer patients

Below: a rally by the Unification Church (also known as the 'Moonies') in Trafalgar Square, London, in 1978

### Further reading

Eric J. Dingwall, *Abnormal hypnotic phenomena*, J & A Churchill Ltd 1968  
Elmer and Alyce Green, *Beyond biofeedback*, Delacourt (New York) 1977  
Brian Inglis, *Natural and supernatural*, Abacus 1977

gardener might 'see' his cancer cells as slugs or greenfly being annihilated by some new, wonder pesticide. In Australia therapist Ainslie Meares simply lays great emphasis on the importance of meditation and tranquillity for his patients.

The Simontons and Dr Meares have been involved mainly with terminally ill cancer victims and neither group of therapists has claimed 'miracle' cures. But both report encouraging signs; many of their patients far outlive the predictions of their doctors, and those whose disease had already spread too far to be helped have learnt to accept their approaching death with astonishing equanimity. Meares also reports that some patients' tumours have suddenly ceased to spread and there are even a few whose tumours have disappeared completely.

Until the mid 1970s, 'evidence' of this kind could be – and was – dismissed out of hand. Although by then it had to be conceded that the mind might be able to exercise some control over the autonomic nervous system, it was going too far to believe it could influence the growth of tumours. But even this line of defence has been breached by the discovery of the *endorphins*, the chemical messenger service through which the placebo effect operates. It can no longer be claimed that the imagination has no direct line through to the body.

Despite the revolutionary implications of the discoveries of auto-suggestion, biofeedback and endorphins, the scientific establishment seems hardly to be aware of them. Or if it is, it is studiously ignoring them.

### Modern mind control

However despite official apathy, ordinary people are beginning to get the message. Since the 1970s there has been a massive proliferation of groups that use – in one form or another – the benefits of auto-suggestion. Some, such as those based on autogenic training, offer it 'straight'. Others have become quasi-religious cults such as the Silva Mind Control group, the Scientologists and the 'Moonies'. Unfortunately, like any truly effective mind control technique, it can be used for good or for evil.

There is also a growing realisation that the power of auto-suggestion can account for many well-attested 'miracles' of healing, which sceptics have always tended to dismiss as superstitious fairy tales. Given the extraordinary circumstances surrounding a powerful spiritual experience, such as a meeting with Christ as in the New Testament, there is little wonder that the individual's mind can be 'shocked' into releasing its own healing potential.

So perhaps the Sermon on the Mount had it right after all. No man by taking conscious *thought* can 'add one cubit to his stature' – or alter his body in another way – but by learning how to unlock his mind's staggering potential 'all things may be added unto him'.





Dear Sir,

I have had several strange experiences throughout my life, many of which have foretold tragedies that were about to befall people I had never met.

Once, when I was sitting in my garden one fine evening, I was watching the clouds float past when suddenly they seemed to take on the shape of a boat on water. Then a voice in my head told me that somebody important and well-respected would die on water. Then – as if to explain further – the cloud formation exploded. This didn't really mean much to me at the time and I quickly forgot about it, but within that same week Lord Mountbatten was blown up on his private boat.

My mother also has these kinds of experience; the latest was in mid or late December 1980. She was walking around town when suddenly and quite unexpectedly the ground began to tremble underneath her. She was naturally alarmed and had a quick look around to see other people's reactions, but everybody else went on behaving as though nothing had happened. She told me about it as soon as I got home from work. The next day there was a bad earthquake in Italy.

Yours faithfully,  
Kathryn Roberts

Clacton, Essex

Dear Sir,

As an investigator of alleged UFO sightings, I do not agree with many of Carl Sagan's conclusions. But I am in total agreement with him when he says that 'people tend to see what they wish to see'.

For example, consider the illustration on page 755 (issue 38 of *The Unexplained*) showing the figures from the Gate of the Sun at Tiahuanaco.

The figure on the left is obviously carrying in its hand an inverted camera tripod. Turn the picture upside down – and the pan and tilt head becomes apparent. This is confirmed by the fact that the figure is carrying no fewer than five twin lens cameras in their carrying cases. One can see the flap at the top of each case, and a knob protruding through the side of each case. Further confirmation lies in the fact that beneath the two cameras on the back of the figure there appear to be four spare rolls of film!

The 'eye' on the figure on the right is neither a deep sea diver nor an astronaut – it is, in fact, an electric coffee percolator, complete with spout, lid, handle and twin controls.

All of which, of course, is bunk. But look at the pictures again. And I bet that the tripod, cameras, films and coffee pot are now instantly recognisable! Interpretation of many of these ancient carvings is rather like seeing faces in a coal fire.

Yours faithfully,  
John Morris

Liverpool

Dear Sir,

What is the difference between 'Spiritism' and 'Spiritualism'? According to Allan Kardec, 'Spiritism concerned the relation of the material world with spirits – actual entities in touch with us – whereas Spiritualism merely denoted a belief that there was . . .

more to man than matter.' (*The Unexplained*, issue 26 page 518.)

This is not so for modern Spiritualism which, we maintain, is a science, a philosophy and a religion. Spiritualists adhere to the seven principles given by the spirits through Mrs Emma Hardinge Britten, which are:

1. The Fatherhood of God.
2. The brotherhood of man.
3. The immortality of the soul, and its personal characteristics.
4. The proven facts of communion between departed human spirits and mortals.
5. Personal responsibility.
6. Compensation and retribution hereafter for all the good or evil done here.
7. A path of eternal progress open to every human soul who wills to tread it.

The first three principles underline the main difference between ourselves and Christians, who separate 'Father, Son and Holy Ghost'. While we accept Jesus as a great teacher, we believe that we are all sons or daughters of God and parts of that Holy Spirit that is God. This is the basis of our religion.

Principle number four defines our scientific quest for knowledge. We do not expect anyone to believe what we say blindly but encourage them to find out the truth for themselves.

Critics may say that most demonstrations of spiritualist phenomena concern trivial matters. So what? If a stranger can tell you small details of your own life which you had forgotten, they will certainly be important to you.

Not until a fundamental understanding has been gained through such research should investigation into communication be attempted in the home, and then preferably with an experienced medium who is able to accept benign spirits and reject mischievous ones. We do not shed our characteristics when we die and groups of people 'doing it for laughs' are more than likely to attract like-minded spirits – who could get the last laugh!

The last three principles relate to our philosophy. We are all responsible for our actions and cannot expect to be absolved of all our sins by a deathbed repentance. That would be too easy.

Spiritualists, generally, liken this life on Earth to falling rain which, on reaching the ground, is absorbed into it and fulfils the function of bringing life to the plants, or it flows into rivers and on into the sea. By then the drops have lost their individuality and, after purification by evaporation into clouds, new drops develop. Then the cycle begins again.

This may be too simplistic a simile and many argue that those who die young, without the opportunity to learn from living, may return for a second chance, or more. Many others believe that reincarnation is the method whereby we receive compensation or retribution for good or evil past lives.

I have, in this letter, merely sought to clarify the position and opinions of Spiritualists I have known for over 70 years. Maybe Allan Kardec got his definitions wrong.

Yours sincerely,  
Harold R. Barnard

Brixton, London



THE WORLD'S MYSTERIOUS PLACES - 18  
Mesa Verde, Colorado

